

TREX, A NOVEL GENE OF TRAF-INTERACTING EXT GENE FAMILY AND
DIAGNOSTIC AND THERAPEUTIC USES THEREOF

ABSTRACT OF THE DISCLOSURE

5 This invention provides an isolated nucleic acid molecule
encoding a Tumor necrosis factor Receptor-Associated Factor
(TRAF) protein-interacting hereditary multiple extoses
(TREX) protein. This invention also provides vectors
comprising the isolated nucleic acid molecule encoding a
10 TREX protein. This invention further provides a purified
TREX protein and antibodies thereto. This invention provides
oligonucleotides comprising a nucleic acid molecule of at
least 15 nucleotides capable of specifically hybridizing
with a unique sequence included within the sequence of an
isolated nucleic acid molecule encoding TREX protein. This
15 invention provides an antisense oligonucleotide comprising
a sequence capable of specifically hybridizing with a unique
sequence included within a genomic DNA molecule encoding a
Tumor necrosis factor Receptor-Associated Factor (TRAF)
protein-interacting hereditary multiple extoses (TREX)
20 protein. This invention provides a monoclonal antibody
directed to an epitope of a TREX protein. This invention
provides methods of inhibiting TREX protein interaction with
a TRAF protein; of inhibiting overexpression of TREX
protein; of inhibiting growth of a tumor; of treating
25 abnormalities in a subject associated with overexpression of
TREX. This invention provides pharmaceutical compositions
comprising oligonucleotides effective to prevent
overexpression of a TREX protein or antibodies effective to
block binding of a TREX protein to a TRAF protein; screening
30 for a compounds which inhibit TREX protein and TRAF protein
binding; of detecting predispositions to cancers comprising
TREX mutations; and of diagnosing cancer comprising TREX
mutations.